

**REMARKS**

**I. Status of the Application.**

Claims 1-19 were filed with this application. In a non-final office action dated July 24, 2008, Examiner Greece (a) rejected claims 1-8 under 35 U.S.C. 102 as being obvious over U.S. Patent Publication 2004/0054358 to Cox et al. (the "Cox Reference"); (b) rejected claims 9-19 as being unpatentable over the Cox Reference in further light of U.S. Patent 5,777,719 to Williams et al. (the "Williams Patent"); and (c) rejected claims 8 and 15 for lack of antecedent basis. In a response dated January 26, 2009 and a supplemental response dated April 16, 2009, Applicants (a) amended claims 1 and 9 to clarify that the method employs quadratic fitting to identify spherocylinder refraction, contrary to the cited references, (b) respectfully traversed the examiner's rejections; and (c) amended claims 8 and 15. In a Final office action dated July 2, 2009, Examiner Greece (a) withdrew the rejection of claims 8 and 15 based on antecedent basis, and (b) maintained the rejections based on the Cox Reference and the Williams Patent. In this response, Applicants (a) address previous amendments to claims 1 and 9, and (b) respectfully traverse the examiner's rejections.

**II. Overview of the Cox Reference and the Williams Patent**

Both the Cox Reference and the Williams Patent disclose a method for which aberration data is collected and then used to provide a higher order aberration correction for the eye. (Williams Patent, Col. 2, Ins. 43-45, "a primary object of the present invention to provide a method of and an apparatus for accurately measuring higher order aberrations of the eye and for using the data thus measured to compensate for those aberrations with a customized optical element;" Cox Reference, para 0043, "a customized LASIK treatment to correct lower-order and higher-order aberrations that cause vision defects in the patients eye 120, or a custom treatment

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for a decentered ablation . . . will apply to PRK and LASEK, for example, as well as to the design and performance of custom ophthalmic optics including contact lenses, IOL's, inlays, and onlays.") As such, the Williams Patent and Cox Reference employ new refractive surgery and lens fabrication methods to develop lenses and corneas that will correct other than the typical lower order spherocylinder errors, contrary to the claimed method. Therefore, the cited references do not disclose a method for optimizing a low order correction for spherocylindrical prescriptions that eliminates the need for subjective refractions.

Additionally, neither the Cox Reference nor the Williams Patent eliminate the need for subjective refractions to conduct low order optimizations. In particular, the Cox Reference admits that "the practitioner may want to optimize post-surgical spherical (and other) aberration," indicating that low order aberration correction is not optimized through the method. *Id.* Further, the Cox Reference employs subjective refractions, a process that is eliminated through the use of the method claimed herein. *Id.* (para 120, "The information [from the diagnostic system] is still further modified at 259 by personalized surgeon monogram 260.").

### **III. The Amendment to the Preamble of Claims 1 and 9 that was Previously Submitted Should be Given Patentable Weight.**

The amendment to the preamble of claims 1 and 9 adding "without using subjective refractions," from the response of January 16, 2009, is a limiting aspect of the claims and accordingly should be given patentable weight. According to the MPEP, **reliance upon the preamble in overcoming a pending rejection transforms the preamble into a claim limitation.** MPEP 2111.02; *See Catalina Mktg Int'l v. Coolsaving.com, Inc.*, 289 F.3d at 808-809 (Fed. Cir. 2002) ("[C]lear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation because such

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reliance indicates use of the preamble to define, in part, the claimed invention." Since in the response of January 16, 2009, Applicants specifically relied on the amendment to the preamble "without using subjective refractions" to distinguish from the Cox Reference and the Williams Patent, the amendment of "without using subjective refractions" should be considered a limiting feature.

However, in order to resolve all doubt regarding the limitation of "without using subjective refractions," Applicants have previously amended claims 1 and 9 in the response of August 31, 2009 to incorporate this element as a specified claim limitation. Therefore, for all of the above reasons, the amendments to claims 1 and 9 should be given patentable weight.

#### **IV. Claims 1-8 As Previously Amended are Not Anticipated by the Cox Reference**

##### **A. Standard for Anticipation**

In order to establish that the claims are anticipated by the Cox Reference, the reference must teach every element of the claim. MPEP § 2131. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Indeed, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." MPEP 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989), emphasis added. Therefore, without enabling disclosure of each and every element or limitation of a claim, a *prima facie* case of anticipation cannot be made against a claim.

B. The "Equivalent Quadratic Fitting Calculation" Limitation is not Present in the Cox Reference

Claim 1 of the pending Application requires "perform[ing] an equivalent quadratic fitting calculation to obtain at least one clinical refractive prescription," which is not present in the Cox Reference. The Office Action points to paragraph [0043] of the Cox Reference as teaching this limitation, but upon inspection, no mention of an equivalent quadratic fitting calculation is present in paragraph [0043] or in the remainder of the Cox Reference. Office Action, page 2. Additionally, the Office Action notes that a "second order Zernike is easily converted to spherocylindrical prescription." *Id.* Applicants respectfully point out that a straight conversion of the second order Zernike does not generate an optimized spherocylindrical prescription as required by claim 1. Further, the optimization step of claim 1 requires an equivalent quadratic fitting calculation, which the simple conversion of the second order Zernike does not satisfy. Therefore, since at least the equivalent quadratic fitting and optimization are not taught by the Cox Reference, the Cox reference does not anticipate Claim 1 or any of the claims which depend on claim 1. Accordingly, Applicants respectfully request that the rejection of claims 1-8 be withdrawn.

C. Claim 1 as Previously Amended Emphasizes Lack of Anticipation

Applicants have previously amended claim 1 to emphasize that the claims are directed to "A method for optimizing a refractive prescription without using subjective refractions," and have further amended claim 1 herein to include the limitation that employs "the equivalent quadratic fitting calculation that optimizes the quality of the retinal image to obtain at least one clinical refractive prescription . . . ." **The method taught in the Cox reference does not disclose optimizing lower order prescriptions without the use of subjective refractions as discussed in detail in Section III above.** Further, the methods used in the Cox Reference do not

optimize the quality of the retinal image as claimed. Therefore, since each and every claim element is not expressly or inherently described in the Cox Reference, it does not anticipate claim 1. Accordingly, Applicants respectfully request reconsideration and allowance of claim 1 as amended. Further, since claims 2-8, and 20-21 depend from claim 1, allowance of those claims is respectfully requested.

**V. Claims 9-19 are Not Obvious in Light of the Cox Reference or the Williams Patent**

**A. Standard for Obviousness**

MPEP § 2142 states that "[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness." A *prima facie* case of obviousness requires that "an apparent reason to combine the known elements in the fashion claimed . . . should be made explicit," a reasonable likelihood of success in modifying the prior art, and the cited references must contain all of the limitations of the claims. *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 1741 (2007); MPEP §2143. Therefore, in order for references to render the claims obvious, (1) the cited references must include each and every limitation within the claim cited; (2) the examiner must explicitly point to a particular reason to combine or modify the one or more references; and (3) there must be a reasonable basis to believe that the modifications or combination of the cited references would be successful. For the reasons cited below, Applicants respectfully submit that the amended claims are not subject to a *prima facie* conclusion of obviousness.

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B. Claim 9 as Previously Amended Emphasizes Lack of Obviousness

Applicants previously amended claim 9 to emphasize that the claims are directed to "A method for optimizing a refractive prescription without using subjective refractions." Since neither the Cox Reference nor the Williams Patent disclose optimizing lower order prescriptions without the use of subjective refractions as discussed in detail in Sections III and IV above, Applicants respectfully request reconsideration and allowance of the claim. Further, since claims 10-19 and 22-24 depend from claim 9, Applicants respectfully request allowance of those claims.

**VI. Applicants petitions for an extension of time.**

Applicants respectfully petition for an extension of time of one (1) month, under 37 C.F.R. § 1.7(a) and 1.136(a), to November 2, 2009, based on the original July 2, 2009 date of the Office Action mailed for the present Application. Applicants shall authorize payment for this extension in the amount of \$130 (Large Entity) via credit card at the time of electronically filing of the present response.

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CONCLUSION

For all the foregoing reasons, it is respectfully submitted that Applicants have made a patentable contribution to the art and that this response places all of the pending claims of the above identified application in condition for allowance. Favorable reconsideration and allowance of this application is respectfully requested. Should the Examiner find that Applicants arguments do not overcome the rejections of the Office Action, Examiner is invited to contact the undersigned to resolve any remaining disputed issues.

Applicants electronically submit herewith payment in the amount of \$810.00 in satisfaction of the fees associated with the Request for Continued Examination made herewith. In the event that Applicants have inadvertently overlooked the need for an extension of time or payment of an additional fee, Applicants conditionally petition therefore, and authorize any fee deficiency to be charged to deposit account 09-0007. Please refer to File No. P00873-US-01 (16584.0023) when making a charge or credit against the deposit account.

Sincerely,

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